

What is claimed is:

1. A system employed by an application for encoding URL link data for use in detecting unauthorized URL modification, comprising:

5 a link processor for processing URL data by
identifying an address portion of said URL,
encrypting said address portion of said URL,
incorporating said encrypted address portion of said URL
together with the non-encrypted portion of said URL into a single processed URL

10 data string; and
a communication processor for incorporating said processed URL data string into formatted data for communication to a request device.

15 2. A system according to claim 1, wherein said link processor
adaptively identifies said address portion as URL data either lying
between "http://" and a question mark "?" or from data lying between "http://" and a
pound/number sign "#" - whichever comes first.

20 3. A system according to claim 1, wherein said link processor
adaptively identifies said address portion based on the application
associated with said URL.

25 4. A system according to claim 3, wherein said link processor
adaptively uses (a) an address portion for ASP (Active Server Page)
applications comprising a SERVER_NAME and SCRIPT_NAME and (b) an address
portion for a non-ASP applications comprising a SERVER_NAME, SCRIPT_NAME,
and PATH_INFO.

30 5. A system according to claim 1, wherein said link processor
compresses said address portion of said URL prior to encryption and
incorporation into said processed URL data string.

35 6. A system according to claim 5, wherein said link processor
converts said address portion of said URL to lower case before
compression.

7. A system according to claim 5, wherein said link processor compresses said address portion using at least one function from (a) a hash function, (b) another compression function.

5 8. A system according to claim 1, wherein said link processor incorporates a session identifier, identifying a particular session of user initiated operation of said application, into said processed URL data string.

10 9. A system according to claim 8, wherein said link processor incorporates said session identifier into said processed URL data string by formatting said session identifier into a data field including said session identifier and encrypted address separated by a colon (that is, session identifier:encrypted address).

15 10. A system according to claim 1, wherein said link processor concatenates said address portion of said URL together with data associated with a personal record to form a data element, and encrypts said data element for incorporation into said single processed URL data string.

20 11. A system according to claim 10, wherein said data associated with a personal record is at least one of, (a) a patient identifier, (b) a user identifier, (c) an encounter identifier and (d) an observation identifier.

25 12. A system according to claim 1, wherein said link processor encrypts said address portion of said URL using an RSA (Rivest Shamir Adleman) algorithm.

13. A system employed by an application for encoding URL link data for use in detecting unauthorized URL modification, comprising:

a link processor for processing URL data by
identifying an address portion of said URL,
compressing said identified address portion,
encrypting said compressed address portion of said URL,
incorporating said encrypted address portion of said URL
together with the non-encrypted portion of said URL into a single processed URL
data string; and

a communication processor for incorporating said processed URL data
string into formatted data for communication to a request device.

14. A system according to claim 13, wherein said link processor
converts said identified address portion to lower case prior to compressing said
converted identified address portion using a hash function.

15. A system employed by an application for decoding URL link data
encoded for use in detecting unauthorized URL modification, comprising:

an input processor for receiving an encoded URL;

a link processor for processing URL data by
identifying an encrypted address portion of said received
encoded URL,

decrypting said encrypted address portion of said URL to
provide a decrypted URL address portion,

a validation processor for determining if said decrypted URL address
portion has been subject to unauthorized modification.

16. A system according to claim 15, wherein said decrypted URL
address portion is a first hash value, and

said validation processor,

applies a hashing function to a URL corresponding to said
received encoded URL and derived from a source different to the source of said
received URL, to provide a comparison second hash value, and

compares said comparison second hash value with said first hash
value, and upon a match determines a successful validation of said received encoded
URL.

17. A system according to claim 15, wherein said link processor identifies and extracts a session identifier from a non-encrypted portion of said received encoded URL.

5 18. A system according to claim 15, wherein said decrypted URL address portion includes data associated with a personal record.

10 19. A system according to claim 18, wherein said data associated with a personal record is at least one of, (a) a patient identifier and (b) a user identifier.

20 20. A method employed by an application for encoding URL link data for use in detecting unauthorized URL modification, comprising the steps of:
15 identifying an address portion of a URL;
encrypting said address portion of said URL;
incorporating said encrypted address portion of said URL together with the non-encrypted portion of said URL into a single processed URL data string; and
incorporating said processed URL data string into formatted data for communication to a request device.

25 21. A method employed by an application for decoding URL link data encoded for use in detecting unauthorized URL modification, comprising the steps of:
receiving an encoded URL;
identifying an encrypted address portion of said received encoded URL;
decrypting said encrypted address portion of said URL to provide a decrypted URL address portion; and
30 determining if said decrypted URL address portion has been subject to unauthorized modification.

22. A method according to claim 21, wherein said decrypted URL address portion is a first hash value, and including the steps of

applying a hashing function to a URL corresponding to said received encoded URL and derived from a source different to the source of said received URL, to provide a comparison second hash value, and

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comparing said comparison second hash value with said first hash value, and upon a match determining a successful validation of said received encoded URL.

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